1883MNRAS..43..285.

Observations of Occultations of Stars by the Moon, of Phenomena of Jupiter's Satellites, and of the Eclipse of the Sun, 1882, May 16, made at the Royal Observatory, Greenwich, in the year 1882.

(*Communicated by the Astronomer Royal.*)

Occultations of Stars by the Moon.

Day of Obs.	Phenomenon.	Telesc.	Power.	Moon's Limb.	Mean Solar Time of Observation.			Obs.
					h	m	s	
1882. Feb. 24 (*a*)	Disapp. 53 Tauri	Altaz.	100	Dark	7	45	17·65	T.
Apr. 1	Disapp. *e* Leonis	E. Eq.	70	"	11	30	52·12	L.
May 27 (*b*)	Disapp. W.B. xii., 334	"	140	"	9	43	4·30	A. D.
	Disapp. W.B. xii., 334	Altaz.	100	"	9	43	4·90	H.
Aug. 2	Reapp. 22 Piscium	"	"	"	10	50	14·80	T.
Sept. 20	Disapp. μ Sagittarii	"	"	"	9	19	21·52	L.
	Disapp. μ Sagittarii	E. Eq.	70	"	9	19	21·82	A. P.
Oct. 1	Reapp. *l* Tauri	Altaz.	100	"	17	35	59·87	T.
2	Reapp. χ^2 Orionis	"	"	"	12	21	23·64	H.
22	Disapp. κ Aquarii	E. Eq.	70	"	10	25	13·27	T.
24	Reapp. 51 Piscium	Altaz.	100	"	11	49	32·39	H.
Nov. 26	Reapp. χ^3 Orionis	E. Eq.	70	"	11	38	1·94	L.

Notes.

(*a*) Star faint; cloudy.

(*b*) Instantaneous.

1883MNRAS..43..286.

Phenomena of Jupiter's Satellites.

Day of Observation.		Satellite.	Phenomenon.		Telescope.	Power.	Mean Solar Time of Observation.	Mean Solar Time of N.A.	Observer.
							h m s	h m s	
1882, Jan.	7	III.	Tr. Ingr.	First contact	E. Eq.	140	6 29 57	6 32 0	L.
				Bisection	,,	,,	6 35 6		
				Last contact	,,	,,	6 39 56		
	7	II.	Occ. D.	First contact	,,	,,	7 29 38	7 32 0	,,
				Last contact	,,	,,	7 34 15		
	7	III.	Tr. Egr.	First contact	,,	,,	8 20 19	8 26 0	,,
				Last contact	,,	,,	8 30 6		
	7	I.	Tr. Ingr.	First contact	,,	,,	8 28 4	8 27 0	,,
				Last contact	,,	,,	8 33 9		
Feb.	15 (*a*)	II.	Occ. D.	Last contact	,,	,,	9 28 6	9 29 0	,,
Mar.	3 (*b*)	II.	Tr. Ingr.	First contact	,,	,,	9 47 11	9 54 0	A.D.
				Last contact	,,	,,	9 53 10		
	17 (*c*)	I.	Tr. Ingr.	First contact	,,	,,	9 14 35	9 15 0	H.P.
				Last contact	,,	,,	9 20 4		
Apr.	3	III.	Tr. Ingr.	First contact	,,	,,	7 42 35	7 45 0	A.D.
	6 (*d*)	II.	Ecl. R.	First seen	,,	70	8 58 32	8 57 40	T.
Oct.	3	III.	Occ. R.	Last contact	Altaz.	100	13 12 24	13 7 0	H.C.

1883MNRAS..43..286.

Day of Observation.		Satellite.	Phenomenon.		Telescope.	Power.	Mean Solar Time of Observation.	Mean Solar Time of N.A.	Observer.
							h m s	h m s	
1882, Oct.	4 (*e*)	I.	Occ. R.	First seen	E. Eq.	140	11 0 40	11 2 0	H.P.
				Last contact	,,	,,	11 6 9		
	25 (*f*)	I.	Occ. D.	Last contact	,,	,,	13 11 39	13 10 51	L.
Nov.	17	I.	Ecl. D.	Last seen	,,	60	13 20 49	13 20 33	H.P.
	25	I.	Tr. Ingr.	Last contact	,,	70	13 8 21	13 7 0	T.
	27	I.	Tr. Egr.	Bisection	,,	,,	9 48 10	9 48 0	H.
				Last contact	,,	,,	9 50 27		
Dec.	18	I.	Tr. Ingr.	Last contact	,,	,,	12 49 54	12 44 0	T.
	19	I.	Occ. D.	First contact	,,	310	9 47 28	9 50 0	A.D.
				Last contact	,,	,,	9 52 12		
	19	I.	Occ. R.	First seen	,,	,,	12 3 46	12 6 0	,,
				Last contact	,,	,,	12 8 20		
	21	I.	Ecl. R.	First seen	S. E. Eq.	285	6 34 51	6 34 51	,,
				Full brightness	,,	,,	6 38 10		
	21 (*g*)	I.	Ecl. R.	First seen	E. Eq.	310	6 34 41	6 34 51	L.

Notes.

(*a*) *Jupiter's* limb diffused. (*b*) *Jupiter's* limbs boiling: observation considered very rough. (*c*) Planet steady.
(*d*) ,, ,, (*e*) *Jupiter's* limb diffused. (*f*) *Jupiter* extremely tremulous: observation not considered good.
(*g*) *Jupiter's* limb very ill-defined.

1883MNRAS..43..286.

Eclipse of the Sun, 1882, *May* 16.

Beginning and Ending of the Eclipse.

1882.	Phenomenon.	Telescope.	Power.	Mean Solar Time of Observation. h m s	Obs.
May 16	First contact	S.E. Eq.	500	18 11 15·24	W.C.
(*a*)	„	Altaz.	120	18 11 27·11	A.D.
	Last contact	S.E. Eq.	500	19 23 13·43	W.C.
(*b*)	„	Altaz.	120	19 23 8·55	A.D.
	„	E. Eq.	70	19 23 9·25	M.
	„	N. Eq.	220	19 23 1·42	L.

Notes.

(*a*) Observation satisfactory. (*b*) Observation pretty accurate.

During the eclipse the following observations were made with the S.E. Equatorial:—

h m h m		
From 18 13 to 18 31 G.M.T.	10 differences of	R.A. of *p* and *f* cusps.
18 31 to 18 48	10 „	N.P.D. of limbs of Sun and Moon.
18 48 to 19 8	8 „	R.A. of *p* and *f* cusps.
19 8 to 19 22	9 „	N.P.D. of *p* and *f* cusps.

The clear aperture of the object-glass of the S.E. Equatorial is 12$\frac{3}{4}$ inches, of the E. Equatorial 6$\frac{3}{4}$ inches, of the Altazimuth 4 inches, and of the N. Equatorial 4·1 inches.

The initials W.C., A.D., M., T., L., H., H.P., H.C., are those of Mr. Christie, Mr. Downing, Mr. Maunder, Mr. Thackeray, Mr. Lewis, Mr. Hollis, Mr. H. Pead, and Mr. Cox.

Royal Observatory, Greenwich:
1883, *January* 20.

Observation of Comet a, 1883, *made at the Royal Observatory, Greenwich.*

(*Communicated by the Astronomer Royal.*)

The observation was made with the East or Sheepshanks Equatorial, by taking transits over two cross wires at right angles to each other, and inclined 45° to the parallel of Declination.

Green. Mean Solar Time. d h m	Obs.	♉ − ✱ R.A. m s	♉ − ✱ N.P.D. ′ ″	No. of Comp.	Apparent R.A. h m s	Apparent N.P.D. ° ′ ″	Star.
Mar. 8 9 0	H.	+0 11·0	−2 58·96	1	0 59 56·62	58 23 36·81	*a*